

JESSICA BAKER FLECHTNER

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CAREER PROFILE

- Experienced **Immunologist** with extensive experience in vaccine development, cell and molecular biology
- Proficient at heading teams and supervising scientists, graduate students and research associates
- Broad-ranging knowledge of immunological disorders and expertise in leading scientific procedures and treatments in diverse animal models

EDUCATION

Ph.D.	Immunology, Cornell University, Ithaca, New York	1999
B.S.	Animal Science, Cornell University, Ithaca, New York	1993

INDUSTRY AND ACADEMIC EXPERIENCE

Genocea Biosciences, Inc., Cambridge, Massachusetts <u>Senior Scientist/Group Leader</u>	March 2007-Present
Biovest International, Worcester, Massachusetts <u>Immunology Consultant</u>	June 2006-March 2007
Antigenics Inc., Lexington, Massachusetts Department of Tumor Immunology <u>Senior Scientist</u> (2003-2005)	2001-2005
Mojave Therapeutics, Inc., Hawthorne, New York <i>Intellectual property acquired by Antigenics Inc.</i> <u>Scientist</u> (2001-2002), <u>Scientist II</u> (2003)	
Harvard Medical School and Dana-Farber Cancer Institute, Boston, Massachusetts Department of Pathology and Department of Cancer Immunology & AIDS <i>Laboratory of Harvey Cantor, MD</i> <u>Research Associate/Research Fellow</u>	2000-2001
Cornell University, Ithaca, New York James A. Baker Institute for Animal Health <i>Laboratory of Douglas F. Antczak, VMD</i> <u>Predoctoral Research Fellow</u> (1996-1999) <u>Laboratory Technician</u> (1993-1996) <u>Agricultural Assistant, Equine Genetics Center</u> (1991-1993)	1991-1999

PROFESSIONAL AFFILIATION

American Association of Immunologists	1999-2001; 2004-present
American Association for Cancer Research	2004-present

AWARDS AND HONORS

National Research Service Award (NRSA) Fellow, Program in Cancer Immunology (DFCI/NCI) No. T32 CA 70083	2000-2001
Research Assistantship, USDA Animal Biotechnology Training Grant, No. 96-38420-3061	1997-1999
NIH Travel Scholarship, The American Society for Reproductive Immunology Trends in Reproductive Immunology for the Next Millennium, Cooperstown, New York	1999

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John Hughes Memorial Travel Scholarship, Seventh International Symposium on Equine Reproduction, Pretoria, South Africa	1998
Field of Immunology Travel Award, Cornell University for Seventh International Symposium on Equine Reproduction, Pretoria, South Africa	1998
Field of Immunology Travel Award, Cornell University for American Association of Immunologists Course in Advanced Immunology, Berkeley, California	1997
Young Scientist Travel Award, Thomas G. Wegmann Memorial Symposium on Reproductive Immunology, Banff, Alberta, Canada	1996

PATENTS

Immunogenic Polypeptides and Uses Thereof. **Flechtner JB** and Levey DL. Provisional Application filed March 16, 2005, Antigenics Inc.

Improved heat shock protein-based vaccines and immunotherapies. **Flechtner JB**, Prince-Cohane K, Mehta S, Slusarewicz P, Andjelic S, Barber B. International Patent Application No. PCT/US2004/010983 (pending). Filed April 9, 2004, Mojave Therapeutics, Inc.

Improved heat shock protein-based vaccines and immunotherapies. **Flechtner JB**, Prince-Cohane K, Mehta S, Slusarewicz P, Andjelic S, Barber B. International Patent Application No. PCT/US2004/004340 (pending). Filed February 13, 2004, Mojave Therapeutics, Inc.

PUBLICATIONS

Original Reports:

Flechtner JB, Prince Cohane K, Mehta S, Slusarewicz P, Leonard A, Barber B, Levey DL, and Andjelic S (2006). High affinity interactions between peptides and HSP70 augment CD8⁺ T lymphocyte immune responses. *Journal of Immunology* 177(2):1017-1027.

Flores-Villanueva PO, Granados J, Dobesova LM, **Baker JM**, Zuñiga J, Selman M, Cantor H, and Yunis EJ (submitted). Association of MCP-1/CCL2 promoter polymorphism with progression to clinical tuberculosis, regulation of IL-12 production and $\alpha\beta\delta$ osteopontin/Eta-1 receptor expression by MCP-1/CCL2.

Jansson M, Panoutsakopoulou V, **Baker JM**, Klein L, and Cantor H (2002). Cutting edge: Attenuated experimental autoimmune encephalomyelitis in Eta-1/osteopontin-deficient mice. *Journal of Immunology* 168(5):2096-2099.

Carpenter S, **Baker JM**, Bacon SJ, Hopman T, Maher JK, Ellis SA, and Antczak DF (2001). Molecular and functional characterization of genes encoding horse MHC class I antigens. *Immunogenetics* 53(9):802-809.

Baker JM, Stidworthy M, Gull T, Novak J, Miller JM, and Antczak DF (2001). Conservation of recognition of antibody and T-cell defined alloantigens between species of equids. *Reproduction, Fertility and Development* 13(7-8):635-345.

Baker JM, Bamford AI, Carlson ML, McCulloch CE, and Antczak DF (2000). Trophoblast as an Immunological Target. *Journal of Reproduction and Fertility Supplement* 56:635-344.

Baker JM, Bamford AI, and Antczak DF (1999). Modulation of maternal immune responses during pregnancy: an immunologic barrier to interspecies matings? *Journal of Immunology* 162(8):4496-4501.

Lunn DP, Holmes MA, Antczak DF, **Baker JM**, Bendali-Ahcene S, Blanchard-Channell M, Byrne KM, Cannizzo K, Davis W, Hamilton MJ, Hannant D, Kondo T, Kydd JH, Monier MC, Moore PF, Neeraj N, O'Neil T, Schram BR, Sheoran A, Stott JL, Suguira T, and Vagnoni KE (1998). Report of the second Equine Leukocyte Antigen Workshop, Squaw Valley, California, July 1995. *Veterinary Immunology and Immunopathology* 62(2):101-143.

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Abstracts:

Dong D, **Flechtner JB**, Bauer M, Monks S, Aristarkhov A, Chicz R, and Tomlinson A (2005) Characterization of Hsc70 Peptide Binding and Chaperone Activity by Enzyme Refolding Assays.
The 19th Annual Symposium of the Protein Society, Boston, MA, July 30-August 3.

Prince Cohane K, **Flechtner JB**, Mehta S, Slusarewicz P, Levey DL, Barber B, and Andjelic S (2005) Hybrid peptides containing a high affinity hsp70 binding sequence, cleavable linker and MHC class I epitope enhance CD8+ T cell specific immunity in the presence of multiple heat shock proteins.
American Association for Cancer Research Annual Meeting, Anaheim, CA, April 16-20.

Flechtner JB, Prince Cohane K, Burke J, Kashi R, and Levey DL (2005) A novel peptide designed to bind heat shock protein with high affinity encoding tandem tumor-specific MHC class I and MHC class II antigens induces potent anti-tumor immunity in the presence and absence of heat shock protein.
Keystone Symposia Basic Aspects of Tumor Immunology, Keystone, CO, March 19-24.

Baker JM, Prince K, Mehta S, Slusarewicz P, Barber B, and Andjelic S (2003) Higher affinity interaction between MHC class I epitope and HSP70 augments CD8+ T lymphocyte immune responses.
Keystone Symposia Basic Aspects of Tumor Immunology, Keystone, CO, February 17-23.

Jansson M Panoutsakopoulou V, **Baker JM**, Klein L, and Cantor H (2001) Improved recovery from Experimental Autoimmune Encephalomyelitis in Eta-1 deficient mice: The role of Eta-1 in type-1 cellular immunity.
11th International Congress of Immunology, Stockholm, Sweden, July 22-27.

Jansson M, **Baker JM**, Panoutsakopoulou V, Sanchirico M, Klein L, Linkemann K, Ashkar S, and Cantor H (2000). The role of Eta-1 in Type-1 Immunity.
Harvard University Immunology Department Retreat, Waterville Valley, NH, September 15-17.

Adams AP, **Baker JM**, and Antczak DF (2000). Immune cells and placentation.
The Society for the Study of Reproduction 33rd Annual Meeting, Madison, WI, July 15-18.

Flaminio MJBF, **Baker JM**, Hopman TJ, and Antczak DF (2000). Trophoblast cells induce polarization of cytokine production by lymphocytes.
Amer. Assoc. of Immunol. & Clin. Immunol. Society Joint Annual Meeting, Seattle, WA, May 12-16.

Carpenter S, **Baker JM**, Hopman T, Bacon S, Maher J, Ellis S, and Antczak DF (2000). Molecular and functional characterization of horse MHC class I genes.
International Plant and Animal Genome Conference, San Diego, CA, January 9-12.

Baker JM, Bamford AI, and Antczak DF (1999). Alterations in maternal immune responses during pregnancy.
American Society for Reproductive Immunology — Trends in Reproductive Immunology for the Next Millennium, Cooperstown, NY, June 2-5.

Baker JM, Carlson ML, Bamford AI, McCulloch CE, and Antczak DF (1999). Trophoblast as an immunological target.
American Society for Reproductive Immunology — Trends in Reproductive Immunology for the Next Millennium, Cooperstown, NY, June 2-5.

Baker JM, Bamford AI, and Antczak DF (1999). Downregulation of CTL responses in pregnant equids.
FASEB — Experimental Biology '99, Washington, D.C., April 17-21. (Abst. B-331)

Baker JM, Bamford AI, and Antczak DF (1996). Anti-paternal cytotoxic lymphocyte (CTL) activity during allogeneic or xenogeneic pregnancy in equids.
T.G. Wegmann Mem. Symposium on Reprod. Immunol., Banff, Alberta, Canada, September 8-12. (Abst. C52)